

THREE NEW BEETLES OF THE GENUS
CRYPTOCEPHALUS (CHRY SOMELIDÆ)

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Extensive study of the genus *Cryptocephalus* has proven the existence of three new members. These are presented as a fore-runner to a revision that will include the American species from north of Mexico.

Cryptocephalus cerinus White, new species

Wax yellow, large, robust, especially proportionally broader at base of elytra, the third and fifth elytral intervals conspicuously wider, punctures on the elytral disk separated by at least their own diameters.

Female: Head pale, interocular impression and around antennal insertion slightly darker, surface smooth, sparsely punctured, antennæ reaching to first abdominal segment, outer segments darker; thorax two-thirds as long as wide, sides gradually narrowing toward apex then more arcuate to apical angles, hind angles directed backward, surface nearly impunctate, pale brown or slightly fuscous, with a pale yellow crescent-shaped area extending across the base, the tips directed forward, a smaller pale triangular area at the apical margin with the inner angle prolonged up the disk mid-way from the apex; elytra wax yellow with rows of brown punctures, scutellar stria short reaching basal third, first stria extending to middle, the second united at apex with the seventh, the third united at apex with the fourth, the fifth united at apex with the sixth, seventh united at the humeral angle with the marginal stria, all striæ entire except sixth which is confused at humeral third, intervals feebly convex, shining and very feebly wrinkled, intervals wide; body beneath and femora pale; prosternum very broad and only feebly convex with the anterior cusp quite blunt and the posterior lateral prominence directed backwards; last ventral segment with a deep, round fovea. Length 6 mm., width 3.25 mm.

Male: Similar to female but smaller as usual, the anterior cusp of the prosternum much more pronounced and acute while the posterior prominences are more widely separated than in the female, only an inconspicuous indication of the fovea on the last ventral segment. Length 4.5 mm., width 2.5 mm.

Type locality: Lebec, California.

Host: *Chrysothamnus nauseous* subsp. *mohavensis* Hall.

Holotype female, allotype male, and nineteen paratypes collected by author are in his collection, two paratypes in collection of the California Academy of Sciences, two in A. R. Mead's collection, one in each of the following collections: A. T. McClay and M. A. Cazier, three in R. F. Peter's collection, two in the H. B. Leech collection and ten in the Roy S. Wagner collection.

The larger size, more robust form, arrangement of the elytral striæ and punctures and the distinct difference of the prosternum will easily separate this species from *C. spurcus* Lec., which seems to be its nearest relative. *C. spurcus* is consistently found on *Isocoma* while *C. cerinus* seems restricted to *Chrysothamnus*.

***Cryptocephalus spurcus vandykei* White, new subspecies**

Fuscous with three black vittæ on each elytron confused, black markings on the pronotum, medium to large size, form robust, punctures heavy and close together.

Female: Head pale, a narrow inter-orbital impression and the area around the antennal insertion darker, surface moderately punctate with a single hair arising from each puncture, antennæ reaching to basal third of elytra, uniformly dark; thorax twice as broad as long, feebly arcuate at sides, more strongly arcuate near apical angles, hind angles directed backward, color fuscous with lateral basal spots, a median triangular basal spot and two large lateral discal spots darker, the discal spots gradually fading laterally and then fusing with the lateral basal spots, surface moderately finely punctate, the punctation more dense and coarse in the darker areas; elytra fuscous, minutely rugose with rows of coarse black punctures, scutellar stria short, not reaching base, first stria reaching to apical third, second nearly joining the submarginal at apex, the third and fourth united at apex, fifth and sixth united at apex, submarginal united at base with the marginal; punctures very close, nearly confluent in the striæ; area between scutellar stria and suture black, interval between scutellar and first stria fuscous, third interval black, fourth fuscous from apex to basal fourth where it becomes black, fifth entirely black, sixth fuscous from base to apical fifth where it is black, seventh black from base to middle where it becomes fuscous, eighth fuscous from apical tip to humeral umbone which is black, marginal vitta black from apex to middle, fuscous from middle to base; body beneath piceous, paler at middle and sides; prosternum similar to that of *C. spurcus* Lec. but a little more convex and the posterior prominences more approximate; last ventral segment with a large deep fovea at the middle; pygidium dark and heavily punctate. Length 5.25 mm., width 3 mm.

Male: Similar to female but smaller and without the fovea on the last ventral segment. Length 4.25 mm., width 2.25 mm.

Type locality: Carpinteria, California.

Host: *Isocoma venetus* subsp. *vernoniodes* Jepson.

Holotype female, allotype male, with twenty-five paratypes collected by the author are in his collection; several paratypes in collection of the California Academy of Sciences and two in each of the following collections: A. T. McClay, A. R. Mead, M. A. Cazier.

There seems to be very little variation in this subspecies other than in degree of color and that is not pronounced. The punctures on the elytral disk are quite constant and the color pattern is very similar in the 75 or 100 specimens examined. The size ranges from 4 to 6 mm. in length. This form has been included in collections with the typical *spurcus* which differs from it by being lighter and having the lighter areas dirty yellow where *vandykei* is fuscous. The markings on the prothorax and the elytral vittæ are dissimilar. I take pleasure in naming this distinct geographical subspecies after Dr. E. C. Van Dyke.

Cryptocephalus cerinus nevadensis White, new subspecies

Wax yellow, large, robust, especially proportionally broader at base of elytra, the third and fifth elytral intervals conspicuously wider, punctures on the elytral disk separated by at least their own diameters, three well defined black vittæ on each elytron occupying the second, fourth, and sixth intervals.

Female: Head pale, interocular impression and around antennal insertion slightly darker, sparsely, finely punctured and pubescent, antennæ reaching to first abdominal segment, outer segments darker; thorax two-thirds as long as wide, sides gradually narrowing toward apex, then more arcuate to apical angles; hind angles directed backward; surface shining nearly impunctate, pale with the discal and lateral basal spots fuscous; elytra straw-yellow with three well defined vittæ occupying the second, fourth, and sixth elytral intervals, scutellar stria short composed of nine to twelve punctures and extending to basal third, first stria reaching apical third where it nearly joins the second; second extending to apex where it meets the submarginal, third and fourth joined at apex as are the fifth and sixth, the sixth slightly confused behind humeral umbone; submarginal joining the marginal stria at the humeral angle, all striæ regular with exception of

sixth, intervals very feebly convex and feebly wrinkled; body beneath and legs pale with occasional sclerites darker, last ventral segment with a deep longitudinal fovea. Length 6.25 mm., width 3.3 mm. Male: Similar to female but smaller and with the anterior cusp of the prosternum much more pronounced. Length 5 mm., width 2.5 mm.

Type locality: Carson Valley, Nevada.

Host: *Chrysothamnus*?

Holotype female (No. 4534), allotype male (No. 4535), in collection of the California Academy of Sciences; two paratypes in author's collection, all collected by Dr. E. C. Van Dyke.

This form is similar to *C. cerinus* but differs by having very well developed black vittæ. The prosterna of the two forms are identical. Since this form has been confused with *C. confluens* Say it is desirable to give it a subspecific standing for its geographical range is apparently distinct from that of *cerinus*.

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¹ Culture Methods on Invertebrate Animals. By a Committee from Sec.F of the American Association for the Advancement of Science. Comstock Publishing Co., Inc. Ithaca, N. Y., 1937. Price \$4.00.